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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,302	10/22/2003	Douglas M. Dillon	PD-N94026K	2255

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THE DIRECTV GROUP INC  
PATENT DOCKET ADMINISTRATION RE/R11/A109  
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EXAMINER

AVELLINO, JOSEPH E

ART UNIT PAPER NUMBER

2143

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/691,302	Applicant(s) DILLON, DOUGLAS M.	
	Examiner Joseph E. Avellino	Art Unit 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on ~~20 June 2005~~ 12/19/05
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 20-24, 29-32 and 34-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-24, 29-32 and 34-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 20-24, 29-32, and 42-52 are presented for examination; claims 20, 29, 42, and 44 independent. The Office acknowledges the addition of claims 46-52.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 25, 2005 has been entered.

#### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 20-24, 29-32, and 42-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ioannidis et al. (*IP-based Protocols for Mobile Internetworking*, ACM SIGCOMM Computer Communication Review, vol. 21, issue 4, Sep. 1991) (hereinafter Ioannidis) in view of Attanasio et al. (USPN 5,371,852) (hereinafter Attanasio).

4. Referring to claim 20, Ioannidis discloses a driver (i.e. software) embodied in a computing-device-readable medium for use in a computer device memory having a

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TCP/IP stack, said driver being configured to send an IP packet from the TCP/IP stack through an IP tunnel across a network (p. 240, col. 1),

wherein the IP packet is form the TCP/IP stack, which IP packet comprises an IP header, is placed within an Ethernet packet before being received by said driver (it is inherent that the packet is placed within the Ethernet packet since this denotes the physical layer and cannot be transmitted through the network without it), wherein the Ethernet packet comprises an Ethernet header and an Ethernet checksum (an inherent feature of the Ethernet protocol) (p. 240, col. 1),

wherein said driver adds another IP header so as to result in a packet that comprises both the IP header and the other IP header (p. 240, col. 1-2).

Ioannidis does not specifically disclose removing the Ethernet header and Ethernet checksum from the Ethernet packet. In analogous art, Attanasio discloses another driver for use in a computing device to send an IP packet through an IP tunnel across a network which discloses the driver removes the Ethernet header and Ethernet checksum from the Ethernet packet (col. 11, lines 55-60). It would have been obvious to one of ordinary skill in the art to combine the teaching of Ioannidis with Attanasio since Ioannidis discloses the use of IP packets, but does not specifically discuss as to how they originate or how they are formed. This would lead one of ordinary skill in the art to search for art as to how these IP packets are formed, eventually finding the system described in Attanasio and its novel method describing how frame headers are stripped to be processed (col. 11. lines 55-60).

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5. Referring to claim 21, Ioannidis discloses the network is the Internet (i.e. intercampus communications, as is a network of networks as Applicant states on p. 7, lines 20-21) (Figure 1, p. 238, col. 1).
6. Referring to claim 22, Ioannidis discloses an apparatus on the network receives the IP packet through the IP tunnel (Figure 1 p. 237; p. 240, col. 2).
7. Referring to claim 23, Ioannidis discloses the apparatus on the network sends the received IP packet towards its destination via a network (p. 240, col. 2).
8. Referring to claim 24, Ioannidis discloses the invention substantively as described above. Ioannidis does not specifically state an internet browser running on the computing device accesses a server through the TCP/IP stack of the computing device which sends a request to the server by way of said driver and the apparatus on the network. In analogous art, Attanasio discloses an internet browser (i.e. software running on a node able to transmit a request, such as rlogin or NFS) running on the computing device accesses a server through the TCP/IP stack of the computing device which sends a request to the server by way of said driver and the apparatus on the network (col. 13, lines 52-65). It would have been obvious to one of ordinary skill in the art to combine the teaching of Ioannidis with Attanasio since Ioannidis discloses the use of IP packets, but does not specifically discuss as to how they originate or how they are formed. This would lead one of ordinary skill in the art to search for art as to how these

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IP packets are formed, eventually finding the system described in Attanasio and its novel method describing how frame headers are stripped to be processed (col. 11. lines 55-60).

9. Claims 29-32, and 42-52 are rejected for similar reasons as stated above. Furthermore Attanasio discloses having a frame header, and discloses that the MM header contains a header length value (col. 12, lines 48-53), yet does not specifically state that this is an Ethernet checksum, however one of ordinary skill in the art would realize the benefits of utilizing an Ethernet checksum in the system of Attanasio in order to figure out whether the packet was received correctly, reducing the amount of errors received by higher level protocols, and thereby reducing wasted processing in the system. Furthermore Ioannidis discloses the computing device is a personal computer (i.e. ancillary machine) (e.g. abstract).

### ***Response to Amendment***

10. Applicant's arguments dated October 25, 2005 have been fully considered but are not persuasive.

11. In the remarks, Applicant argues, in substance, that (1) Ioannidis does not disclose the source IP address and the destination IP address are the only IP addresses contained in the packet received from the TCP/IP stack.

12. As to point (1) Applicant is incorrect. Applicant will appreciate that the output routine occurs at the MSS (i.e. Mobile Support Stations). It is received from the mobile host which contains the TCP/IP stack. Therefore once the packet (with only one Source and Destination IP address set) is received at the MSS, the packet is encapsulated with *two* source and destination IP address sets (i.e. another IP header) (See section 2.5, "The Network Layer", p. 239). By this rationale, the rejection is maintained.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (571) 272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

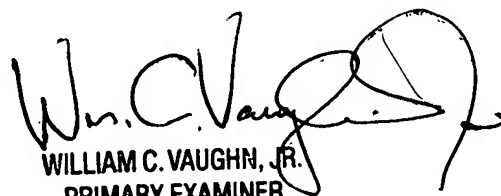
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JEA

July 15, 2005



WILLIAM C. VAUGHN, JR.  
PRIMARY EXAMINER